

GRANT SUMMARY

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Use the tab and arrow keys to move through the form. If field is not applicable, please put N/A in field.

Date filled out: 7-30-2007

Grant Information: Please use complete phrases/sentences. Fields will expand as you type.	
1. Grant Agreement Number:	06-337-559-0
2. Project Title:	Creating Tools for Numeric Nutrient Criteria and Total Management Daily Load (TMDL) Development in San Diego Coastal Lagoons
3. Project Purpose - Problem Being Addressed:	<p>Southern California estuaries and lagoons are heavily influenced by their urbanized watersheds. Watershed runoff, coupled with reduced tidal influence from restricted inlets, has resulted in nutrient-related impairments in many systems, including low dissolved oxygen, excessive algal growth and eutrophication. Eutrophication of estuaries and coastal lagoons has increasingly become a global environmental issue, with clear links between anthropogenic changes in watersheds, nutrient loading to coastal waters, increased primary productivity and decreases in DO availability. To manage eutrophication, it is important to understand not only the sources of nutrients to estuaries relative to historic levels, but also the processes by which nutrients are transformed and recycled within the estuary and how they are linked to indicators of eutrophication and impairment of beneficial uses. Addressing these impairments requires selecting appropriate management endpoints (e.g. dissolved oxygen, algal biomass), based on an understanding of how nutrients cycle within the estuaries. No numeric targets to address these impairments exist at this time, but can be derived either from comparison to a "reference condition" or from a dynamic simulation model that relates inputs to the management endpoints. Because no representative "reference" estuaries exist in the region, a dynamic simulation model is the best tool for determining numeric targets. This model must simulate loads from the watersheds as well as fate and transport in the estuary or lagoon. Data required to develop these models are not currently available for Southern California coastal lagoons.</p> <p>The purpose of this project is to create tools to establish TMDLs to address impairments from nutrient and/or eutrophication in five coastal lagoons: Santa Margarita Estuary, Loma Alta Slough, Famosa Slough, and Buena Vista Lagoon, and San Elijo Lagoon. This project builds on a basic set of hydrodynamic and water quality data that will be collected by watershed stakeholders under an existing monitoring order for the 5 lagoons. The principal objective is to conduct additional process-based monitoring data required to develop and calibrate dynamic simulation models of watershed loading and lagoon water quality. The products from this project will be used to build water quality models that will ultimately determine nutrient load reductions for all five lagoons. These load reductions, once implemented, will result in improved beneficial uses at all five lagoons. These same tools can be used to develop TMDLs in other estuaries and lagoons.</p>
4. Project Goals	<p>a. Short-term Goals: The short-term goal of this project is to conduct process-based monitoring studies to support the development of water quality models predicting nutrient cycling in five San Diego lagoons.</p> <p>b. Long-term Goals: The long-term goal of this project is to build water quality models that will ultimately determine nutrient load reductions for all five lagoons. These load reductions, once implemented, will result in improved beneficial uses at all five lagoons.</p>
5. Project Location: (lat/longs, watershed, etc.)	Santa Margarita Estuary (33.23732, -117.39821), Loma Alta Slough (33.17770, -117.36831), Buena Vista Lagoon (33.17631, -117.34649), San Elijo Lagoon (33.01077, -117.26164), Famosa Slough (32.75087, -117.22799)
a. Physical Size of Project: (miles, acres, sq. ft., etc.)	N/A
b. Counties Included in the Project:	San Diego County

c. Legislative Districts: (Assembly and Senate) Senate District 36, 38, 39 Assembly District 73, 74, 85, 76, 79	
6. Which SWRCB program is funding this grant? Please "X" box that applies.	
<input type="checkbox"/> Prop 13	<input type="checkbox"/> Prop 40 <input checked="" type="checkbox"/> Prop 50 <input type="checkbox"/> EPA 319(h) <input type="checkbox"/> Other
Grant Contact: Refers to Grant Project Director.	
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Grant Time Frame: Refers to the implementation period of the grant.	
From: 1/2007	To: 3/2010
Project Partner Information: Name all agencies/groups involved with project. UCLA, Louisiana State University, TMDL stakeholders of five lagoons	
Nutrient and Sediment Load Reduction Projection: (If applicable) N/A	

Please provide a hard copy to your Grant Manager and an electronic copy to your Program Analyst for SWRCB website posting. All applicable fields are mandatory. Incomplete forms will be returned.